

## 31. A hemodialysis apparatus, comprising:

(a) a dialysate-delivery system for supplying dialysate to a hemodialyzer, the dialysate-delivery system comprising at least one unit selected from the group consisting of (i) a dialysate preparation unit, (ii) a dialysate-circulation unit, (iii) an ultrafiltrate-removal unit, and (iv) a dialysate-monitoring unit; and

(b) a user/machine interface operably connected to the dialysate-delivery system, the user/machine interface comprising a touch screen adapted to display an indicium corresponding to a parameter pertinent to operation of the hemodialysis machine and to permit the user, by touching the indicium, to cause a change in the parameter.

### 32. A hemodialysis apparatus, comprising:

(a) a dialysate-delivery system connectable to a hemodialyzer for supplying dialysate to the hemodialyzer, the dialysate-delivery system comprising at least one unit selected from the group consisting of (i) a dialysate-preparation unit, (ii) a dialysate-circulation unit, (iii) an ultrafiltrate-removal unit, and (iv) a dialysate-monitoring unit;

(b) an extracorporeal blood-delivery system connectable to the hemodialyzer for routing extracorporeal blood to the hemodialyzer in coordination with the

dialysate-delivery system, the extracorporeal blood-delivery system comprising at least one unit selected from a group consisting of (i) a blood-circulating unit, and (ii) a blood-monitoring unit;

(c) a controller connected to and controllably operating the dialysatedelivery system and the extracorporeal blood-delivery system; and

(d) a touch screen connected to the controller, the touch screen adapted to display an indicium corresponding to a parameter pertinent to operation of the hemodialysis apparatus and to permit a user, by touching the indicium, to cause a change in the parameter.

33. A hemodialysis apparatus, comprising:

(a) first and second systems operably connected with each other, the first system being operable to deliver extracorporeal blood from a source to a blood compartment of a hemodialyzer, and the second system being operable to deliver dialysate from a source to a dialysate compartment of the hemodialyzer; and

(b) a touch screen connected to the first and second systems, the touch screen adapted to display an indicium corresponding to a parameter pertinent to operation of the first and second systems and to permit a user, by touching the indicium, to cause a change in the parameter.

A hemodialysis apparatus, comprising:

(a) a dialysate-delivery system for supplying dialysate to a hemodialyzer, the dialysate-delivery system comprising at least one unit selected from the group consisting of (i) a dialysate-preparation unit, (ii) a dialysate-circulation unit, (iii) an ultrafiltrate-removal unit, and (iv) a dialysate-monitoring unit; and



(b) a user/machine interface operably connected to the dialysate-delivery system, the user/machine interface comprising a touch screen that displays information corresponding to a setting of a parameter pertinent to operation of the hemodialysis machine, the touch screen being operable to display an indicium permitting the user to perform, using the touch screen, at least one step of a procedure for changing the setting of the parameter.

- 35. The apparatus of claim 34, wherein the parameter can have a value that changes with time.
- 36. The apparatus of claim 34, wherein the touch screen, responsive to an operator touching the indicium, is operable to display a numerical keypad that is touchable by the operator in performing the procedure for changing the setting of the parameter.

# 37. A hemodialysis apparatus, comprising:

(a) an extracorporeal-blood-delivery system for supplying extracorporeal blood to a hemodialyzer, the extracorporeal-blood-delivery system comprising at least one unit selected from the group consisting of (i) a blood-circulating unit, and (ii) a blood-monitoring unit; and

(b) a user/machine interface operably connected to the extracorporeal-blood-delivery system, the user/machine interface comprising a touch screen that displays information corresponding to a setting of a parameter pertinent to operation of the hemodialysis machine, the touch screen being operable to display an indicium permitting the user to perform, using the touch screen, at least one step of a procedure for changing the setting of the parameter.

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- 38. The apparatus of claim 37, wherein the blood-circulating unit comprises a blood pump.
- 39. The apparatus of claim 37, wherein the blood-monitoring unit comprises at least one of a blood-flowrate controller, a venous pressure monitor, and an arterial pressure monitor.

40. A hemodialysis apparatus, comprising:

- (a) a dialysate-delivery system connectable to a hemodialyzer for supplying dialysate to the hemodialyzer, the dialysate-delivery system comprising at least one unit selected from the group consisting of (i) a dialysate-preparation unit, (ii) a dialysate-circulation unit, (iii) an ultrafiltrate-removal unit, and (iv) a dialysate-monitoring unit;
- (b) an extracorporeal-blood-delivery system connectable to the hemodialyzer for routing extracorporeal blood to the hemodialyzer in coordination with the dialysate-delivery system, the extracorporeal blood-delivery system comprising at least one unit selected from a group consisting of (i) a blood-circulating unit, and (ii) a blood-monitoring unit;
- (c) a controller connected to and controllably operating the dialysatedelivery system and the extracorporeal-blood-delivery system; and
- (d) a user/machine interface operably connected to the dialysate-delivery system and the extracorporeal-blood-delivery system, the user/machine interface comprising a touch screen that displays information corresponding to a setting of a parameter pertinent to the hemodialysis machine, the touch screen being operable to display an indicium permitting the

user to perform, using the touch screen, at least one step of a procedure for changing the setting of the parameter.

### 41. A hemodialysis machine, comprising:

(a) means for controlling a dialysate parameter selected from a group consisting of dialysate temperature and dialysate concentration, and means for delivering the dialysate to a dialysate compartment of a hemodialyzer; and

(b) a user/machine interface operably connected to said means for controlling the dialysate parameter, the user/machine interface comprising a touch screen adapted to display an indicium corresponding to a parameter pertinent to operation of the hemodialysis machine and to permit the user, by touching the indicium, to cause a change in the parameter.

#### **REMARKS**

This Preliminary Amendment is submitted in the above-identified continuation application being filed herewith. Pursuant to this Preliminary Amendment, Claims 1 - 29 have been cancelled and newly submitted Claims 30 - 41 added. Applicants note for the record that Claims 30 - 41 were pending on appeal in U.S. Patent Application Serial No. 09/067,922, the parent of this patent application (as Claims 30-35 and 37-42 of that application). Applicants also note for the record that Claim 36 of U.S. Patent Application Serial No. 09/067,922 that was pending on appeal has not been added to this patent application as it is now a claim in U.S. Patent Application Serial No. 09/689,503 also is a continuation of U.S. Serial No. 09/067,922.

This Preliminary Amendment does not add new matter.